

## WHAT IS CLAIMED IS:

1. A printing system in which an image sensing apparatus and printing apparatus directly communicate with each other, and said printing apparatus prints  
5 image data transmitted from the image sensing apparatus, wherein

said printing apparatus comprises:

first transmission means for transmitting function information of said printing apparatus from  
10 said printing apparatus to said image sensing apparatus after a protocol is established by applications installed in said printing apparatus and said image sensing apparatus;

first reception means for receiving image data  
15 and information associated with a feature amount of the image from said image sensing apparatus; and

correction means for correcting the image data received by said first reception means on the basis of the feature amount, and

20 said image sensing apparatus comprises:

second reception means for receiving the function information from said printing apparatus;

feature amount extraction means for extracting a feature amount of a sensed image; and

25 second transmission means for transmitting information associated with the feature amount extracted by said feature amount extraction means to

said printing apparatus on the basis of the function information received by said second reception means.

2. The system according to claim 1, wherein said printing apparatus comprises output means for printing  
5 out the image corrected by said correction means.

3. The system according to claim 1, wherein said image sensing apparatus further comprises designation means for designating an image to be transmitted to said printing apparatus, and said second transmission  
10 means transmits the information associated with the feature amount together with information that designates the image designated by said designation means.

4. The system according to claim 1, wherein said  
15 second transmission means transmits a feature amount of a type according to the function information received by said second reception means.

5. The system according to claim 1, wherein said feature amount extraction means generates histograms  
20 associated with lightness, saturation, and hue of a sensed image.

6. The system according to claim 1, wherein said printing apparatus comprises:

feature amount extraction means for extracting a  
25 feature amount of an image from the image data received by said first reception means; and

correction means for correcting the image data received by said first reception means on the basis of at least one of information associated with a first feature amount of the image received from said image sensing apparatus, and a second feature amount of the image extracted by said printing apparatus.

7. A method of controlling a printing system in which an image sensing apparatus and printing apparatus directly communicate with each other, and the printing apparatus prints image data transmitted from the image sensing apparatus, comprising:

a first transmission step of transmitting function information of the printing apparatus from the printing apparatus to the image sensing apparatus after a protocol is established by applications installed in the printing apparatus and the image sensing apparatus;

a feature amount extraction step of extracting a feature amount of a sensed image on the image sensing apparatus side;

a second transmission step of transmitting information associated with the feature amount extracted in the feature amount extraction step to the printing apparatus on the basis of the function information transmitted in the first transmission step; and

a correction step of correcting image data by the printing apparatus on the basis of the information

associated with the feature amount transmitted in the second transmission step.

8. The method according to claim 7, further comprising a print step of printing out image data corrected in the correction step.

9. The method according to claim 7, wherein the second transmission step includes a step of transmitting a feature amount of a type according to the function information.

10. A printer which directly communicates with an image sensing apparatus, comprising:

transmission means for transmitting function information of said printer to the image sensing apparatus after a communication with the image sensing apparatus is established;

reception means for receiving image data and information associated with a feature amount of the image data according to the function information from the image sensing apparatus; and

print means for printing an image which is obtained by correcting the image data received by said reception means using the information associated with the feature amount.

11. The printer according to claim 10, wherein the feature amount includes at least one of lightness, saturation, and hue histograms of a sensed image.

12. A method of controlling a printer which directly communicates with an image sensing apparatus, comprising:

a transmission step of transmitting function  
5 information of said printer to the image sensing apparatus after a communication with the image sensing apparatus is established;

a reception step of receiving image data and information associated with a feature amount of the  
10 image data according to the function information from the image sensing apparatus; and

a print step of printing an image which is obtained by correcting the image data received by said reception means using the information associated with  
15 the feature amount.

13. An image sensing apparatus which directly communicates with a printer, comprising:

reception means for receiving function information of the printer after a communication with  
20 the printer is established;

feature amount extraction means for extracting a feature amount of image data; and

transmission means for transmitting image data and information associated with the feature amount  
25 extracted by said feature amount extraction means to the printer.

14. The apparatus according to claim 13, wherein said transmission means transmits a feature amount of a type according to the function information.

15. The apparatus according to claim 13, wherein said  
5 feature amount extraction means generates histograms associated with lightness, saturation, and hue of a sensed image.

16. The apparatus according to claim 13, further  
comprising image sensing means and recording means for  
10 recording image data obtained by said image sensing means on a recording medium, and in that said feature amount extraction means extracts a feature amount upon sensing an image, and records information associated with the feature amount on the recording medium  
15 together with the image data, and said transmission means selectively transmits one of feature amounts recorded on the recording medium in accordance with the function information.

17. A method of controlling an image sensing  
20 apparatus which directly communicates with a printer, comprising:

a reception step of receiving function  
information of the printer after a communication with  
the printer is established;

25 a feature amount extraction step of extracting a feature amount of image data; and

a transmission step of transmitting image data and information associated with the feature amount extracted in the feature amount extraction step to the printer.

5 18. The method according to claim 17, wherein the transmission step includes a step of transmitting a feature amount of a type according to the function information.

19. The method according to claim 18, wherein the  
10 image sensing apparatus has image sensing means and recording means for recording image data obtained by the image sensing means on a recording medium, and

the feature amount extraction step includes a step of extracting a feature amount upon sensing an  
15 image, and recording information associated with the feature amount on the recording medium together with the image data, and the transmission step includes a step of selectively transmitting one of feature amounts recorded on the recording medium in accordance with the  
20 function information.